REMARKS

In the Office Action the Examiner noted that claims 1-8 and 10-12 are pending in the application. The Examiner rejected claims 1, 3, 6-9, and 12, and objected to claims 2, 4, 5, 10, and 11. By this Amendment, claims 1, 2, 5, 7, and 10 have been amended, and claim 9 has been cancelled without prejudice or disclaimer. Thus, claims 1-8 and 10-12 are pending in the application. The Examiner's rejections are traversed below.

Claim Rejections Under 35 USC §112

In item 2 on page 2 of the Office Action the Examiner rejected claims 2 and 7 under 35 U.S.C. §112, stating that "the phrase 'may be' renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention." As claim 7 does not contain the aforementioned phrase, but claim 10 does, the Applicant assumes that the Examiner intended to cite claims 2 and 10 for this rejection. Pursuant to this assumption, the Applicant has amended claims 2 and 10 to be more definite. As such, withdrawal of the §112 rejection is earnestly and respectfully solicited.

Claim Objections

In item 3 on page 2 of the Office Action the Examiner noted that claim 5 is a duplicate of claim 4, and requested the Applicant to amend or cancel claim 5. Claim 5 has been amended to correct the typographical error that caused it to be a duplicate of claim 4, and withdrawal of the objection to claim 5 is earnestly and respectfully solicited.

Claim Rejections Under 35 USC §102

In item 5 on pages 2-3 of the Office Action the Examiner rejected claims 1, 3, 6-9, and 12 under 35 U.S.C. §102(a) as being anticipated by the Applicant's Admitted Prior Art, hereinafter referred to as "AAPA", citing pages 1-3 and FIGS. 1-3 of the present application.

Claim 1 of the present invention, as amended, recites:

> An organic EL display control system comprising:
> a display panel including data lines and scan lines, the data lines arranged in a transverse direction, the scan lines arranged in a perpendicular direction to the data lines; and
> a driver controller having a display RAM storing data;

wherein the data is vertically written on and vertically read from the display RAM, and the read data is transmitted to the display panel.

Therefore, "the data is vertically written on and vertically read from the display RAM, and the read data is transmitted to the display panel." By being vertically read from the display RAM, columns of data are read and transmitted to the display panel, rather than rows of data being read and transmitted to the display panel.

In rejecting claim 1, the Examiner states that "AAPA discloses in Fig. 2 an organic electro-luminescent display control system comprising: display panel including data lines and scan lines, the data lines arranged in a transverse direction, the scan lines arranged in a perpendicular direction to the data lines; a driver controller 20 having a display RAM storing data, and the data from the display RAM is vertically read and transmitted to the display pane." The Examiner goes on to state, in support of his position, that "the display RAM 23 is configured so that data of 8 lines corresponding to one column write at a time (see page 2, [0009])." The Applicant respectfully disagrees with the Examiner's understanding of AAPA and the present invention.

FIGS. 1 and 2, each of which illustrate AAPA, both show a 24 bit data latch circuit 25 that reads data out of the display RAM 23 one row at a time to transmit the data to the display panel 10. Paragraph [0010] of the present application describes this operation of AAPA:

> "Then, for the read operation, the controller 28 controls the common driver circuit 21 and the segment driver circuit 22 to display data stored in the display RAM 23 on the display panel 10. More specifically, the controller 28 designates a line address through the line address generating circuit 26 and thereafter stores 24-bit data of a designated row at a time in the 24-bit data latch circuit 25. In FIG. 2, an 18^{th} row is designated. The controller 28 sends a signal so that the common driver circuit 21 may scan the designated row (*i.e.,* the 18^{th} row) of the display panel 10 so that 24-bit data in the 24-bit latch circuit 25 may be applied to the display panel 10 through the segment driver circuit 22. That is, when the common driver circuit 21 scans the 18^{th} row of the display panel 10, the data latch circuit 25 latches the 24-bit data of the 18^{th} row and outputs this data through the segment driver circuit 22 to the display panel 10."

Therefore, in AAPA, the data is read from the display RAM in rows, and then transmitted to the display panel. This is in direct contrast to the present invention, in which data is vertically read (i.e., in columns) and then transmitted to the display panel.

The Examiner states that "the display RAM 23 is configured so that data of 8 lines corresponding to one column write at a time (see page 2, [0009])." While it is true that data is written to the display RAM in 8 bit columns, through the 8 bit data line, in AAPA, claim 1 of the present invention recites that "the data is vertically written on and vertically **read** from the display

RAM, and the read data is transmitted to the display panel." The fact that data may be merely written to the display RAM in 8 bit vertical columns in AAPA does not disclose the element of claim 1 in which the data is read in columns to be transmitted to the display panel.

Therefore, AAPA does not recite the feature in which "the data is vertically written on and vertically read from the display RAM, and the read data is transmitted to the display panel." Accordingly, AAPA does not recite every element of the Applicant's claim 1. In order for a document to anticipate a claim, the document must teach each and every element of the claim (MPEP §2131). Therefore, since AAPA does not teach the features recited in independent claim 1, as stated above, it is respectfully submitted that claim 1 patentably distinguishes over AAPA, and withdrawal of the §102(a) rejection is earnestly and respectfully solicited.

Claims 3 and 6 depend from claim 1 and include all of the features of that claim plus additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 3 and 6 also patentably distinguish over the prior art.

Claim 7 of the present invention, as amended, recites:

> An organic EL display control system, comprising:
> a display panel including a segment terminal and a common terminal, the segment terminal connected to data lines, the common terminal connected to scan lines arranged in a perpendicular direction to the data lines; and
> a driver controller having a display RAM storing data and outputting the data from the display RAM in the same direction as a longitudinal direction of the scan lines;
> wherein a line length between the common terminal and the driver controller is shorter than that between the segment terminal and the driver controller.

In rejecting claim 7, the Examiner states that AAPA shows "in FIG. 2 that the display panel including a segment terminal connect to the data line and common terminal connect to the scan lines, the common terminal connected to the scan lines and arranged in a perpendicular direction of the data lines; that the driver controller having RAM 23 storing data and outputting the data from the display RAM in the same direction as a longitudinal direction of the scan lines (page 2, [0005]-[0010])." Again, the Applicant respectfully disagrees with the Examiner's understanding of AAPA.

Figure 2 of AAPA shows the segment terminal 12 at a side portion of the display panel 10, and the common terminal 11 at the bottom portion of the display panel 12. Therefore, the data lines, connected to the segment terminal, extend across the display panel 10 in a transverse direction, and the scan lines extend in a vertical direction from the bottom of the display panel 10. As previously discussed, the data in the display RAM 23 is output in rows, or

in lines in a transverse direction, to the data latch circuit 25. In other words, the data in the display RAM 23 is output in the same direction as a longitudinal direction of the data lines of the display panel 10.

This is in direct contrast to the present invention, in which "the data from the display RAM" is output "in the same direction as a longitudinal direction of the scan lines." In the present invention, the direction of the scan lines is the same as the direction of the lines of data read from the display RAM. The opposite is shown in FIG. 2. Accordingly, AAPA does not recite every element of the Applicant's claim 7. Therefore, since AAPA does not teach the features recited in independent claim 7, as stated above, it is respectfully submitted that claim 7 patentably distinguishes over AAPA, and withdrawal of the §102(a) rejection is earnestly and respectfully solicited.

Claims 8 and 12 depend from claim 7 and include all of the features of that claim plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claims 8 and 12 also patentably distinguish over the prior art.

Summary

In accordance with the foregoing, claims 1, 2, 5, 7, and 10 have been amended, and claim 9 has been cancelled. No new matter has been introduced. Claims 1-8 and 10-12 are pending and under consideration.

There being no further outstanding objections or rejections, it is respectfully submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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